

# PATENT ABSTRACTS OF JAPAN

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## (54) HAIR DYE

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To obtain an emulsion type hair dye, having excellent preservation and blending stabilities, capable of manifesting good dyeability for the hair without causing the dyeing speck and crocking and excellent in hair setting properties.

**SOLUTION:** This hair dye is obtained by passing an amino-functional polyorganosiloxane through the following respective steps (A) to (D): (A) The amino-functional polyorganosiloxane is blended with a surfactant to provide a premixture. The content of the amino groups in the amino-functional polyorganosiloxane is preferably 0.1–3 mequiv./g and the surfactant is at least partially a nonionic type. A polyoxyethylene alkyl ether and a polyoxyethylene alkyl phenyl ether are optimally used in combination. (B) Water is partially added to the premixture in the step (A) and stirring is carried out to afford a primary mixture. (C) The remaining water is then added to the primary mixture to provide a secondary mixture. (D) An acid (e.g. acetic acid) is added to the secondary mixture to regulate the pH to 4–10 and a part of the amino-functional polyorganosiloxane in the system is converted into a salt.

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